UYO Outer Marker (OM)

George Bush Houston Intercontinental Airport
Houston, Texas

May 29, 2009

Environmental Due Diligence Audit

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EXECUTIVE SUMMARY

Parsons conducted an Environmental Due Diligence Audit (EDDA), or Phase I Environmental Site Assessment, for the UYO Outer Marker (OM) property (Site) for the George Bush Intercontinental/Houston Airport (IAH) in Houston, Texas. The UYO OM facility is located off the airport property at 13418 Kuykendahl Road, Houston, Texas. The Site is located approximately 5.5 miles west of the airport in a residential/commercial area. Parsons conducted the audit on behalf of the Federal Aviation Administration (FAA). The site inspection for the EDDA was completed on March 18, 2009.

The purpose of performing the EDDA is to satisfy due diligence requirements for the sale of the UYO OM property. The Site is owned by the FAA. The FAA will not demolish or remove the structures associated with the OM.

The results of the EDDA are based on a Site visit conducted by Parsons on March 18, 2009, subsequent review of historical records, interviews with FAA personnel, and contact with environmental and related regulatory agencies.

The EDDA was performed in accordance with the American Society for Testing and Materials (ASTM), *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (E-1527-05) and the Federal Aviation Administration (FAA) Order 1050.19B, *Environmental Due Diligence Audits in the Conduct of FAA Real Property Transactions*.

The Site encompasses approximately 0.0417 acres of land located approximately 5.5 miles west of IAH runways. An access road connects the Site to Kuykendahl Road. The Site is not located on airport property, but is located in a residential/commercial area. The Site consists of a fiberglass equipment building, an OM antenna set on a concrete pad, a chain-link fence that surrounds the OM facilities, and a utility pole. All of the structures and equipment will remain on the Site.

Historically, the Site was used as an OM since the 1990s. The OM is no longer active.

Parsons has not revealed evidence of a recognized environmental condition[1] (REC) in connection with this Site.

This is an executive summary of findings and should not be relied upon without consulting the attached report for a more detailed description of the EDDA and Environmental Risk Deactivation Assessment. This report is subject to the limitations and exceptions included in this report.

[1] A "recognized environmental condition" is defined in ASTM Standard E-1527-05 as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat (reasonable evidence) of a release of these substances into structures on the property or into the ground, groundwater, or surface water of the property

1.0 SUMMARY

An Environmental Due Diligence Audit (EDDA, or equivalent of a Phase I Environmental Site Assessment) was conducted for the FAA for the UYO Outer Marker (OM) facility (Site) located 5.5 miles west of the George Bush Intercontinental/Houston Airport (IAH). The Site is located in a residential/commercial area. The FAA owns the property and plans to sell the property. This report was prepared in general accordance with the American Society for Testing and Materials (ASTM), *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (E-1527-05), and the Federal Aviation Administration (FAA) Order 1050.19B, *Environmental Due Diligence Audits in the Conduct of FAA Real Property Transactions*.

Site Description and History

The Site encompasses approximately 0.0417 acres of land located approximately 5.5 miles west of the IAH. The Site is located at 13418 Kuykendahl Road and not located on airport property. The Site is owned by the FAA. Access is provided via Kuykendahl Road, an access road, and through a perimeter fence gate located on the west side of the Site. Chain-link perimeter fencing with a locked gate surrounds the OM facilities, providing security and limited access to the OM facilities.

The Site consists of a fiberglass equipment building, an OM antenna, a chain-link fence, and a utility pole. The utility pole is located southwest of the fenced area. The building is approximately 20 years old.

To the south, the Site is bounded by the access road and Kuykendahl Road and a shopping center (Cranbrook Plaza) located south of Kuykendahl Road. A brick building is located southwest of the Site. The building is owned by the City of Houston. A 77-foot tall pole with a bill board on the top is located south of the Site and adjacent to Kuykendahl Road. To the east and west, the Site is bounded by tree-covered property. To the north, the Site is bounded by a construction site for a new school. The Site topography is level.

The equipment building consists of a 6' x 8' fiberglass building with a flat roof. The building is set on four bell bottom concrete piers. The building contains equipment for the OM. There had been four batteries stored in a fiberglass battery box. The batteries have been removed from the building.

Historically, the Site was utilized for the OM since the 1990s.

Findings

Findings for the Site are as follows:

- There is one fluorescent light fixture with two fluorescent bulbs in the building. There is a fire extinguisher in the building. Floor tiles may contain asbestos.
- Electrical power to the Site is still active. A utility pole is located on the Site.
- The antenna is painted. The paint may contain lead.

Data Gaps

Parsons was limited by the records obtained during the course of this investigation. Little information is known about the wells that are located within the search distance of the Site.

Parsons attempted to contact the Houston Fire Department regarding spills at or near the Site. No response has been received.

Parsons requested a search of Sanborn Fire Insurance Maps by EDR. Sanborn Fire Insurance Maps were not available for the Site.

Recommendations

This is an executive summary of findings and should not be relied upon without consulting the attached report for a more detailed description of the EDDA performed by Parsons for the FAA. This report is subject to the limitations included in Section 2.4 of this report.

2.0 INTRODUCTION

2.1 Purpose

This Environmental Due Diligence Audit (EDDA) was conducted to identify apparent recognized environmental conditions (RECs) in connection with the existing UYO Outer Marker OM) located west of the IAH in Houston, Harris County, Texas (Site). Adjoining properties also were considered to determine if there were apparent RECs that might impact the Site. The EDDA was conducted by Parsons on behalf of the Federal Aviation Administration (FAA) because the FAA currently owns the land and plans to sell the property.

Parsons conducted this EDDA in accordance with the American Society of Testing and Materials (ASTM) Standard E 1527-05 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* and the Federal Aviation Administration (FAA) Order 1050.19B *Environmental Due Diligence Audits in the Conduct of FAA Real Property Transactions.*

2.2 Detailed Scope of Services

Parsons conducted the following activities to determine if apparent RECs may be present at the Site:

- Determined the historical and present existence of storage tanks (aboveground or underground) including their locations, sizes, ages, uses, and conditions
- Investigated the potential for contamination based on past and present uses of the Site including pesticides, road salt, solvents, anti-freezes, paints, oils, greases, and fuels
- Investigated the presence, location, and ownership of polychlorinated biphenyl (PCB)-containing or -contaminated equipment, such as electrical transformers and capacitors and determined if the equipment was leaking or showed visual signs of past leakage
- Conducted an inspection of the Site for existing or potential contamination or environmentally related damage, such as stained soils and stressed vegetation
- Determined the potential existence of wetlands, surface water, and flood zones on the Site
- Identified past and present uses of the Site and adjacent sites
- Reviewed environmental characteristics of the Site from at least 1940 to the present
- Provided verbal and/or written communications with Federal, State, and local environmental agencies to determine if any problems with hazardous substances were documented for the Site
- Reviewed available information on the geologic and hydrogeologic profile of the Site
- Reviewed aerial photographs and other historical data from different periods

Environmental Data Resources, Inc. (EDR) conducted a search of environmental databases to determine if documentation existed related to environmental incidents at the Site or at properties in the vicinity of the Site. Parsons also reviewed Federal and State agency on-line databases for documentation regarding the Site and surrounding properties. The results of the review of the EDR report and database reviews are detailed in Section 6 of this report.

The information obtained from each task was dependent on the available resources for the Site.

2.3 Significant Assumptions

The subject property is hereafter referred to as the "Site."

2.4 Limitations and Exceptions

Parsons was required to make its conclusions based on the information available during the period of the assessment within limits as prescribed by the client.

No investigative method can eliminate the possibility of obtaining partially imprecise or incomplete information. Thus, we cannot guarantee that the assessment completely defined the degree or extent of any contamination by hazardous or otherwise harmful substances described in the report or, if no such contamination was found, its absolute absence. Professional judgment was exercised in gathering and analyzing the information obtained, and we commit ourselves to the usual care, thoroughness, and competence of the engineering profession.

This report is not a legal opinion. It does not necessarily comply with requirements defined in any environmental law, such as the "innocent landowner defense" or "due diligence inquiry." Only legal counsel is competent to determine the legal implications and any effect on the financeability, marketability, or value of the property investigated in the study or for the occurrence or non-occurrence of any transaction involving the property.

This report is for the exclusive use of the FAA as it pertains to the Site. Parsons performed the necessary professional services using that degree of care and skill ordinarily exercised under similar circumstances by the professionals practicing in this field. No other warranty, expressed or implied, is made as to the professional advice in this report. Any use of or reliance on this report by a third party shall be at such a party's sole risk.

Parsons can offer no assurances and assumes no responsibility for site conditions or activities outside the scope of the inquiry requested by the FAA as outlined in this document and scope of work. Parsons has relied on the accuracy of documents, oral information, and other materials and information provided by associated parties. It is recognized that regulatory requirements may change, including the revision of accepted action levels, which could necessitate a review of the discussion, findings, recommendations, or conclusions of this report. Parsons will provide in writing any subsequent modification, revision, or verification of this report, if requested.

2.5 Special Terms and Conditions

The results of this EDDA are based on a review of property information obtained through contacts with environmental and related regulatory agency personnel, an inspection of the Site, and a review of acquired environmental regulatory and related agency documents. The conclusion represents Parson's professional opinion, based on these aforementioned sources of information.

2.6 User Reliance

This report was prepared for the exclusive use of the FAA and is limited to observations and records. Use of this report by any other party, other than the FAA, is at their sole risk.

3.0 SITE DESCRIPTION

The Site is located 5.5 miles west of the IAH in Houston, Harris County, Texas, and consists of the existing equipment building, an OM antenna, a chain-link fence, and a utility pole. The Site location and a Site plan are shown on Figures 1 and 2.

The Site is bounded to the south by the access road and Kuykendahl Road, to the east and west by wooded property, and to the north by a construction site.

3.1 Location and Legal Description

The Site is located approximately 5.5 miles west of the IAH. The Site is located at 13418 Kuykendahl Road and is not located on airport property. The FAA owns the Site property. The Site encompasses approximately 0.0417 acres.

The City of Houston does not zone properties. Therefore, the Site does not have a zoning designation.

3.2 Site and Vicinity General Characteristics

The Site is located west of the IAH in Houston, Texas. The area to the south of the Site is occupied by the access road, Kuykendahl Road, and a shopping center (Cranbrook Plaza). A city-owned brick building is located southwest of the Site and west of the access road. A 77-foot pole with a bill board is located south of the Site and adjacent to Kuykendahl Road. The areas to the east and west are occupied by tree-covered land. The area to the north is a construction site for a new school.

The topography of the Site is generally flat. Adjacent land on all sides is at approximately the same elevation as the Site and is also flat.

North Fork Green Bayou is located approximately 2000 feet south of the Site. A wetland area is located east of the Site.

3.3 Current Uses of the Site

The Site is currently a deactivated OM site.

3.4 Description of Site Features

The Site consists of a 6' x 8'equipment building, an OM tower, a chain-link fence, and a utility pole. The OM tower/antenna is between 15' and 25' tall. The chain-link fence surrounds the equipment building and the OM antenna. A locked gate is located on the west side of the fence. The area within the fence is covered with gravel. Kuykendahl Road and the access road provide access to the Site on the south side.

The equipment building is a 6' by 8' fiberglass structure with a flat roof. The equipment building is set on four concrete bell bottom piers that are approximately three to four feet deep. A 4' x 4' concrete step pad is located in front of the door. The building is used to store equipment for the OM. Four batteries had been stored in a fiberglass battery box. The batteries have been removed

from the battery box. The floor of the building is covered with floor tile, which may contain asbestos.

The antenna is located east of the equipment building. The antenna is painted; the antenna pole is not painted.

Electrical power to the Site is active. Electrical power is provided by an underground cable from a utility pole located southwest of the fenced area. The cable is buried approximately 24" to 36" deep.

3.5 Current Uses of Adjoining Properties

A summary of the current uses of the surrounding properties is presented in Table 3-1.

TABLE 3-1
Current Land Use of Adjoining Properties

DIRECTION	CURRENT USE
North	Construction site for school
South	Kuykendahl Road, access road
East	Tree-covered land
West	Tree-covered land

4.0 USER PROVIDED INFORMATION

The FAA is the current Owner and User of the Site.

4.1 Title Records

A chain-of-title report was provided to Parsons by EDR. The report is included in Appendix C.

4.2 Environmental Liens or Activity and Use Limitations

Parsons did not identify the presence of environmental liens or activity and use limitations associated with the Site.

4.3 Specialized Knowledge

The User did not have any specialized knowledge of recognized environmental conditions (RECs) at the Site.

4.4 Commonly Known or Reasonably Ascertainable Information

The User stated that an underground storage tank (UST) was never located at the Site.

4.5 Valuation Reduction for Environmental Issues

As part of the ASTM E 1527-05 process, information must be gathered regarding the prospective purchase price of the property relative to the fair market value of the Site. If there appears to be a value reduction, that reduction must be identified with respect to whether the difference could be attributed to environmental degradation of the property. The FAA is the Owner and User of the Site. Parsons contacted Jana Blanco, FAA Contracting Officer in the SW Regional Office by email. Ms. Blanco stated that she did not know the market value of the Site.

4.6 Owner, Property Manager, and Occupant Information

The owner, property manager, and occupant information is provided in Table 4-1.

Table 4-1
Owner/Occupant Information

ENTITY	NAME
Owner	FAA
Tenant/Lessor	None
Property Owner Representative	Mr. Rickey Smith
Occupant	FAA

Parsons contacted Mr. Smith, owner representative for the FAA on March 18, 2009. Mr. Smith provided information regarding the use of the Site as an OM. Interviews with individuals are provided in Section 8.

4.7 Reason for Performing EDDA

The purpose of performing the EDDA is to satisfy due diligence requirements for the sale of the property. The structures will remain on the Site.

5.0 PHYSICAL SETTING SOURCE(S)

5.1 Topography

According to the Aldine, Texas, USGS quadrangle, the elevation of the Site is approximately 104 feet above mean sea level. The topography of the Site and the immediate vicinity is generally flat and level.

5.2 Geology

The EDR Geocheck-Physical Setting Source Addendum (provided in Appendix B) identifies the dominant soil type in the general area of the Site as Addicks. The soil is described as loam.

5.3 Hydrogeology

North Fork Greens Bayou is located approximately 2000 feet south of the Site and flows southeast. Lake Houston is located approximately 18 miles east. Galveston Bay and the Houston Shipping Channel are located approximately 25 miles southeast of the Site.

Groundwater flow is likely to the southeast.

5.4 Wetlands and Flood Zone Areas

The Site is located adjacent to a wetland area. The wetland area is located to the east of the Site.

The Site is not located near or within a 100-year or 500-year flood plain. The Site is located within Zone X on the FEMA FIRM Panel No. 48201C0460L. Zone X corresponds to areas of 0.2 annual chance of flood.

5.5 Radon

The Site is located within the USEPA Zone 3 with predicted radon levels less than 2 pCi/L.

5.6 Wells

No wells are located on the Site.

According to the EDR report, a well cluster is located approximately 1/8 mile south-southwest (SSW) of the Site. These wells are owned by Harris County Municipal Utility District (MUD) and are designated as public water supply wells.

There are three monitoring wells located at 13125 Kuykendahl Road, which is approximately ¼ mile to the southeast of the Site. Based on the EDR report, these wells are owned by Easy Rest, Inc.

One monitoring well is located within ¼ mile north of the Site. Based on the EDR report, this well is owned by Vestcore FundXX, Ltd.

One monitoring well is located on Gears Road, which is approximately ¼ mile northwest of the Site. This well is owned by EE Reed Construction. The well is plugged.

Two wells are located approximately ¼ to ½ mile southeast of the Site. The wells are designated as a water supply wells.

Two wells are located on Fuel Storage Road, which is approximately ¼ to ½ mile northeast of the Site. The wells are plugged.

One well is located approximately ½ mile east of the Site and is owned by Harris County MUD 3215. The well is designated as a water well.

There are two oil/gas wells located within ½ mile of the Site. One well is located approximately ¼ mile northeast of the Site. The well is a plugged oil well. The second well is located approximately ½ mile west of the Site. This well is designated as a dry hole.

6.0 RECORDS REVIEW

6.1 Standard Environmental Record Sources

A search of environmental databases was conducted by the commercial database service, Environmental Data Resources, Inc. (EDR) for the Site and adjacent properties. The database search follows the ASTM E 1527-05 standards for Phase I Environmental Site Assessments. The database search was conducted to identify the presence of hazardous substances or petroleum products at the Site or at properties in the vicinity. The standard databases searched are presented below. The EDR database search results are included in Appendix B.

6.1.1 Federal Environmental Records

A summary of the federal databases searched by EDR is provided in Table 6-1.

TABLE 6-1
Federal Environmental Database Findings

FEDERAL	DISTANCE (mi)	NO. OF SITES
National Priorities List (NPL)	1	0
Proposed NPL Sites	1	0
NPL Liens	TP	0
Delisted NPL Sites	1	0
CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System)	0.5	0
CERCLIS-NFRAP (No Further Remedial Action Planned)	0.5	0
CORRACTS (Corrective Action Report)	1.0	0
RCRA-TSDF (RCRA Treatment, Storage, and Disposal Sites)	0.5	0
RCRA-LQG (RCRA Large Quantity Generators)	0.25	0
RCRA-SQG (RCRA Small Quantity Generators)	0.25	0
RCRA-CESQG	0.25	0
US ENG CONTROLS (Engineering Controls Sites List)	0.5	0
US INST CONTROL	0.5	0
ERNS (Emergency Response Notification List)	TP	0
US BROWNFIELDS	0.5	0
ODI (Open Dump Inventory)	0.5	0
DEBRIS REGION 9 (Torres Martinez Reservation Illegal Dump Site Locations)	0.5	0
US CDL	TP	0
LIENS-2 (CERCLA liens)	TP	0
LUCIS (Land Use Control)	0.5	0
HMIRS (Hazardous Material Information Reporting System)	TP	0

TABLE 6-1 (continued)
Federal Environmental Database Findings

FEDERAL	DISTANCE (mi)	NO. OF SITES
RCRA-NonGen	0.25	2
DOT OPS (Incident and Accident Data)	TP	0
DOD (Department of Defense)	1.0	0
FUDS (Formerly Used Defense Sites)	1.0	0
CONSENT (Superfund (CERCLA) Consent Decrees)	1.0	0
ROD (Superfund Records of Decision)	1.0	0
UMTRA (Uranium Mill Tailings Sites)	0.5	0
MINES (Mines Master Index File)	0.25	0
TRIS (Toxic Chemical Release Inventory System)	TP	0
TSCA (Toxic Substances Control Act)	TP	0
FTTS FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Acct) Tracking System)	TP	0
HIST FTTS (FIFRA/TSCA Tracking System Administrative Case Listing)	TP	0
SSTS (Section 7 Tracking Systems)	TP	0
ICIS (Enforcement and Compliance Tracking)	TP	0
PADS (PCB Activity Database System)	TP	0
MLTS (Material Licensing Tracking System)	TP	0
RADINFO (Radioactivity)	TP	0
FINDS (Facility Index System)	TP	0
RAATS (RCRA Administrative Tracking System)	TP	0
PWS (Public Water System Data)	TP	0

TP = Target Property

Two sites were found in the EDR search of available government records within the search radius around the target property for the databases listed in Table 6-2.

TABLE 6-2
Located Properties Listed Under Federal Environmental Regulatory Programs

PROPERTY	ADDRESS	DIST (mi)./DIR. FROM SITE	REGULATORY PROGRAM	POTENTIAL REC?	REASONING
Mobil Oil Corporation	13550 Kuykendahl Road, Houston, TX	1/8 to ¼ mile/NW	RCRA-NonGen/FINDS	No	No violations found
Chevron USA, Inc.	13555 Kuykendahl Road, Houston, TX	1/8 to ¼ mile/WNW	RCRA-NonGen	No	No violations found

FFINDS: Facility Index System
RCRA-NonGen: RCRA Non Generator

RCRA-NonGen

Mobil Oil Corporation was identified on the RCRA-NonGen list, which identifies sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-generators do not presently generate hazardous waste. Based on the EDR report, the Mobil Oil Corporation facility is located approximately 1/8 to ¼ mile northwest of the Site. There were no reported violations for this facility. Based on this information, Parsons does not believe that the RCRA-NonGen finding is a REC for the Site.

Chevron USA, Inc. was identified on the RCRA-NonGen list. This Chevron USA, Inc. facility is located at 13555 Kuykendahl Road, which is approximately 1/8 to ¼ mile northwest of the Site. There were no violations found for this facility.

6.1.2 State of Texas and Tribal Records

A summary of the state and tribal databases searched by EDR is provided in Table 6-3.

TABLE 6-3
State and Tribal Environmental Database Findings

STATE/TRIBAL	DISTANCE (mi)	NO. OF SITES
SHWS (State Superfund Registry)	1.0	0
SWF/LF (Permitted Solid Waste Facilities)	0.5	0
CLI (Closed Landfill Inventory)	0.5	0
WasteMgt (Commercial Hazardous & Solid Waste Management Facilities)	TP	0
LPST (Leaking Petroleum Storage Tank Database)	0.5	2
INDIAN LUST (Leaking Underground Storage Tanks on Indian Land)	0.5	0
UST (Petroleum Storage Tank Database)	0.25	4
AST (Petroleum Storage Tank Database)	0.25	0
INDIAN UST (Underground Storage Tanks on Indian Land)	0.25	0
AUL (Sites with Controls)	0.5	0
INDIAN VCP (Voluntary Cleanup Priority Listing)	0.5	0
VCP (Voluntary Cleanup Program Sites)	0.5	0
BROWNFIELDS (Brownfield Site Assessments)	0.5	0
INDIAN ODI (Report on the Status of Open Dumps on Indian Lands)	0.5	0
DEL SHWS (Deleted Superfund Registry Sites)	1.0	0
PRIORITYCLEANERS (Dry Cleaner Remediation Program Prioritization List)	0.5	
LIENS (Environmental Liens Listing)	TP	0
HIST LIENS (Environmental Liens Listing)	TP	0
SPILLS (Spills Database)	TP	0
IOP	TP	0
DRY CLEANERS (Registered Drycleaners)	0.25	0
ENF (Notice of Violations Listing)	TP	0
Ind. Haz Waste (Ind. & Haz. Waste Database)	TP	0
ED AQIF (Edwards Aquifer Permits)	TP	0
AIRS (Air Emission Data)	TP	0
USD (Municipal Settings Designations Database)	0.5	0
TIER 2 (Tier 2 Chemical Inventory Reports)	TP	0
RWS (Radioactive Waste Sites)	TP	0
INDIAN RESERV (Indian Reservations)	1.0	0
SCRD DRYCLEANERS (State Coalition for Remediation of Drycleaners Listing)	0.5	0

TP = Target Property

Located properties listed under state and tribal environmental regulatory programs are presented in Table 6-4. None of the properties presents a REC with respect to the Site.

TABLE 6-4
Located Properties Listed Under State and Tribal Environmental Regulatory Programs

PROPERTY	ADDRESS	DIST. (mi)/DIR. FROM SITE	REGULATORY PROGRAM	POTENTIAL REC?	REASONING
Shell Station	13550 Kuykendahl Road, Houston, TX	1/8 to ¼ mile/NW	UST	No	Four USTs were removed
Northborough No. 3 Plant	13303 Kuykendahl Road	1/8– 1/4 mile/SSE	UST	No	Tank was removed; clean closure issued
Chevron USA, Inc.	13555 Kuykendahl Road, Houston, TX	1/8 to ¼ mile/WNW	UST	No	Lower Elevation
Tune Up Plus	13127 Kuykendahl Road, Houston, TX	1/8 to ¼ mile/SE	UST	No	Tank filled-in
Shell Station	13550 Kuykendahl Road, Houston, TX	1/8 to ¼ mile/ NW	LPST	No	Final concurrence, case closed
Chevron USA, Inc.	13555 Kuykendahl Road, Houston, TX	1/8 to ¼ mile/WNW	LPST	No	Final concurrence, case closed

UST

The TCEQ maintains an inventory of underground storage tanks. The EDR Report identified four UST facilities within ¼ mile of the Site.

Northborough No. 3 Plant, which is a water supply facility owned by the City of Houston, was identified in the UST database. This facility is located approximately 1/8 to ¼ mile SSE of the Site at 13303 Kuykendahl Road. There is one UST reported at the Site. Based on the EDR report, the tank has been removed from the ground. Parsons contacted Michael Jozwiak, the Owner contact. Mr. Jozwiak stated that the tank was removed in October 1993 and a clean closure was issued in May 1994.

A Shell Station, which is located at 13550 Kuykendahl Road, was identified in the UST database. There were four USTs listed for this location. The four USTs have been removed.

A Chevron USA, Inc. facility is located at 13555 Kuykendahl Road, which is approximately 1/8 to ¼ mile west-northwest of the Site. There were five USTs listed for this location. Three tanks have been removed. Two USTs remain at the facility and are used to store gasoline (Tank ID. 00205807) and gasoline and diesel (Tank ID. 00205808).

Tune Up Plus, which is located at 13127 Kuykendahl Road, was identified in the UST database. There is one UST listed for this location. Based on the EDR report, the UST was permanently filled in place.

LPST

The TCEQ maintains an inventory of reported petroleum storage tank incidents. The EDR Report identified two LPST facilities within a 1/2 mile radius of the Site.

A Shell Station, which is located at 13550 Kuykendahl Road, was identified in the LPST database. The leak was reported on March 30, 1992. Based on the EDR report, a final concurrence was issued and the case is closed.

A Chevron USA facility is located at 13555 Kuykendahl Road, which is approximately 1/8 to ¼ mile west-northwest of the Site. Based on the EDR report, the leak was reported on January 5, 1996. A final concurrence was issued and the case is closed.

Unmapped Sites

In addition to the facilities identified in the database report, EDR provided a list of unmappable sites. These sites are listed in one or more environmental databases and the address information is insufficient for EDR to locate and map these sites. The EDR report indicated that there were 17 unmappable sites. A review of the listings indicates that all of the 17 sites are located beyond the applicable search distances from the Site. Based on this information, none of these sites presents a REC.

6.1.3 Tribal Records

Neither the Site nor any facilities within the designated search distances were identified in the Tribal Records databases.

6.1.4 EDR Proprietary Records

Neither the Site nor any facilities within the designated search distances were identified in the Manufactured Gas Plants, EDR Historical Auto Stations, or EDR Historical Cleaners databases.

6.2 Additional Environmental Records Sources

The following additional sources of environmental records were reviewed during this EDDA for the purposes of meeting the ASTM standard. Local regulatory agencies were contacted for reasonably ascertainable and practically reviewable documentation regarding recognized environmental conditions present at the Site and adjacent facilities. Interviews with local regulatory agency representatives are included in Section 8 of this report. The following agencies were contacted for documentation.

Texas Commission of Environmental Quality (TCEQ)

Parsons reviewed data regarding LPSTs for the unmapped sites on the TCEQ website.

United States Environmental Protection Agency (USEPA)

Parsons reviewed the USEPA Envirofacts Facility Registry System for the area in which the Site is located. No records in connection with the Site were identified. Parsons reviewed data regarding a CERCLIS site at the IAH which is an unmapped site.

6.4 Historical Use Information on the Site

The history of the Site was researched to identify obvious uses. Historical land use was researched to the first developed use. Table 6-5 summarizes the availability of information reviewed during this assessment.

TABLE 6-5
Historical Sources

SOURCE	YEARS REVIEWED	AVAILABILITY
Aerial Photographs	1944, 1957, 1962, 1973, 1979, 1986, 1995, 2004, 2006	EDR, Inc.
Sanborn Fire Insurance Maps	NA	Not Available
Historical Topographic Maps	1919, 1945, 1954, 1967, 1982, 1995	EDR, Inc.
City Directory Abstract	1921 – 2004	EDR, Inc.
Chain-of-Title or Preliminary Title Report	1940 - 2008	EDR, Inc.
Previous Assessments	NA	None

6.4.1 Historical Aerial Photographs

Historical aerial photographs dated 1944, 1957, 1962, 1973, 1979, 1986, 1995, 2004, and 2006 were reviewed to determine past use of the Site. Copies of the aerial photographs are provided in Appendix D.

Aerial Photograph dated 1944: The earliest aerial photograph available was taken in 1944. The photograph shows that there is a structure in the area of the Site. The adjacent area is fields.

Aerial Photograph dated 1957: The aerial photograph shows that there is a facility located approximately 1500 feet northeast of the Site.

Aerial Photograph dated 1962: The aerial photograph shows that there are fields located near the Site.

Aerial Photograph dated 1973: The aerial photograph shows little change from the previous photograph.

Aerial Photograph dated 1979: The aerial photograph shows little change from the previous photograph.

Aerial Photograph dated 1986: The aerial photograph shows that the area near the Site has been developed. There is a facility cross the street and there are housing developments to the east and southwest.

Aerial Photograph dated 1995: The aerial photograph shows that the Site has been developed. There is road on the Site.

Aerial Photograph dated 2004: The aerial photograph shows that more development has taken place in the area. A water tower is now located south of the site.

Aerial Photograph dated 2006: The aerial photograph shows little change from the previous photograph.

6.4.2 Sanborn Fire Insurance Maps

Parsons requested EDR to search for Sanborn Fire Insurance Maps. Sanborn Fire Insurance Maps were not available for the Site.

6.4.3 Historical Topographic Maps

A topographic map for the Aldine, Texas Quadrangle from 1919, 1945, 1954, 1967, 1982, and 1995 were reviewed for past uses of the Site. Copies of the historical topographic maps are provided in Appendix D.

Topographic Map dated 1919: The Aldine Quadrangle 1919 map shows that the land in the area of the Site was undeveloped. There are roadways near the Site and a creek is located south of the Site.

Topographic Map dated 1945: The Aldine Quadrangle 1945 map shows that there are two structures in the area of the Site.

Topographic Map dated 1954: The Aldine Quadrangle 1954 map shows no changes in the vicinity of the Site. A pipeline is now located approximately ¼ mile north of the Site.

Topographic Map dated 1967: The Aldine Quadrangle 1967 map shows no changes in the vicinity of the Site.

Topographic Map dated 1982: The Aldine Quadrangle 1982 map shows no changes in the vicinity of the Site.

Topographic Map dated 1995: The Aldine Quadrangle 1995 map shows that the area near the Site has been developed. There is a sewage disposal facility located approximately 2000 feet southeast of the Site. There are more roads in the area.

6.4.4 EDR-City Directory Abstract

The EDR City Directory Abstract for various years between 2004 and 1921 was reviewed for past uses of the Site. A copy of the EDR-City Directory Abstract is provided in Appendix D.

Listings for the Site address were found in 1982 and 1975. In 1975, the listing was for Norma Barker and W.B. Furlow. For 1982, the listing was for Sam W. Barker and Barkers Outdoor Furniture.

Listings for the adjoining properties were found for 1975, 1982, 1993, 2000, and 2004. Listings for the Biltmore Apartments were found beginning in 1993 at 2110 Brundage Drive. This street runs off Kuykendahl Road.

Residential listings are listed for 13100 Kuykendahl Road and 13110 Kuykendahl Road. Vanderbilt Apartments are located at 13110 Kuykendahl Road.

The following commercial listings were also found in the City Directory:

- Robinsons Paint and Body, 13123 Kuykendahl Road
- Tech Net Trek services, 13125 Kuykendahl Road
- Yazdani Trading USA, Inc. and Ymw Collision NYmw Auto Sales, 13129 Kuykendahl Road
- Specs Liquor Stores, 13313 Kuykendahl Road
- Several facilities at the Cranbrook Mall, 13331 Kuykendahl Road

6.4.5 Previous Assessments

No previous assessments were found for the Site.

6.5 Historical Use Information on the Adjoining Properties

The history of the adjoining properties was researched to identify obvious uses.

Data were available from the historical aerial photographs and historical topographic maps and are described in Section 6.4.

7.0 SITE RECONNAISSANCE

7.1 Methodology and Limiting Conditions

Parsons completed a site reconnaissance of the Site and surrounding area on March 18, 2009. Photographs taken during the site visit are shown on Figure 3. The Site reconnaissance included a walk through and around the Site and discussions with facility representatives. Parsons personnel and a representative of the FAA were present for the duration of the Site visit.

7.2 General Site Setting

The Site encompasses approximately 0.0417 acre of land that is located approximately 5.5 miles west of the IAH. The Site is located at 13418 Kuykendahl Road. Access is provided from Kuykendahl Road and an access road. A chain-link perimeter fence with locked gates surrounds the OM facility, providing security and limited access to an equipment building and OM antenna. An equipment building, an OM antenna, utility pole, and chain link fence are currently located on the Site. The OM tower/antenna is between 15' and 25' tall. The Site is covered with gravel. Power is provided to the equipment building by an underground cable which runs from a utility pole located southwest of the equipment building. The utility pole is owned by the FAA. The cable is buried approximately 24" to 36" deep.

The equipment building is a 6' x 8' fiberglass building set on four concrete bell bottom piers. The piers are about three to four feet deep. There is a 4' x 4' concrete step pad adjacent to the south side of the building. The building is approximately 20 years old.

The floor in the equipment building is covered with floor tiles. There is a power panel, exhaust fan, cabinet with safety equipment, fire extinguisher, and a fiberglass battery box (no batteries inside) located in the building. There is one fluorescent light unit with two bulbs in the building.

The OM antenna is located on the east side of the equipment building. The antenna is painted; the tower is not painted. The antenna is located on top of a 30" x 30" concrete pad which is buried approximately four feet deep.

General site setting observations are presented in Table 7-1. A layout plan of the radar building is provided in Figure 4.

TABLE 7-1
General Site Observations

GENERAL SITE SETTING	DESCRIPTION
Current Use of Site	Deactivated OM
Past Use of Site	OM facility
Topography	Site topography is flat; surrounding topography is flat
Description of Structures	OM antenna
	Equipment building – 1 story, 6' x 8' fiberglass structure, approximately 20 years old
	Chain link fence
	Utility pole and underground power cable

7.3 Site Observations

Site observations are presented in Table 7-2.

TABLE 7-2
Interior and Exterior Site Observations

INTERIOR AND EXTERIOR ITEMS	OBSERVATIONS
Aboveground Storage Tank (AST)	None observed
Asbestos containing building materials	Floor tiles may contain asbestos
Below grade vaults	None observed
Burned or buried debris	None observed
Chemical storage or agricultural chemical mixing areas	None observed
Discolored soil or water	None observed
Drains and piping	None observed
Drums	None observed.
Electrical equipment (Polychlorinated biphenyls (PCBs))	None observed
Fill dirt from an unknown source	None observed
Hazardous chemical and petroleum products in connection with known use	None observed
Hazardous chemical and petroleum products in connection with unknown use	None observed
Hazardous waste storage	None observed
Heating and cooling system	None observed
Industrial waste treatment equipment	None observed
Lead-containing Paint	Paint on OM antenna may contain lead
Loading and unloading areas	None observed
Odors	None observed
Pits, ponds, or lagoons	None observed
Pool of liquid	None observed
Process waste water	None observed
Raw material storage or chemical storage areas	None observed
Sanitary sewer system	None observed
Septic system (tank and leach field)	None observed
Soil piles	None observed
Solid waste	None observed
Stained pavement, concrete, or soil	None observed
Stains or corrosion in interior	None observed
Storm basins/catch basins	None observed.
Storm drain	None observed
Stressed vegetation	None observed
Sumps and clarifiers	None observed

TABLE 7-2 (continued)
Interior and Exterior Site Observations

INTERIOR AND EXTERIOR ITEMS	OBSERVATIONS
Surface water	None observed
Underground storage tanks	None observed
Unidentified substance containers	None observed
Waste Water	None observed
Water supplies (potable and process)	None observed
Wells (irrigation, monitoring, domestic)	None observed
Wells (dry)	None observed

7.4 Polychlorinated Biphenyl (PCB)-Containing Equipment

One fluorescent lamp was observed inside the equipment building. The lamp ballast was not readily available for observation without dismantling the fixtures. The lamp ballast may contain oils with PCBs. The oil in the ballast should be assumed to contain PCBs until field verification or sampling occurs. In most cases, PCB free ballasts will provide a verification statement directly on the ballast.

7.5 Mercury-Containing Items

Potentially mercury-containing lighting items include fluorescent lamps (length greater than 1.5 feet and U-shaped and circular) and mercury vapor, metal halide or high-pressure sodium light bulbs. Fluorescent lamps that have green end caps or green manufacturer's statement on the tube are certified by the manufacturer as non-mercury-containing lamps and can be discarded as regular solid waste.

In addition to lighting components, mercury-containing items consist of such devices as Cathode Ray Tubes (CRT), thermometers, manometers, barometers, relay switches, meters, pressure relief gauges, mercury regulators, and other mechanical equipment. Most mercury-containing equipment has a few grams of mercury, although devices such as large manometers may contain much more.

The bulbs of thermometers containing mercury were identified to be silver in color, while those of alcohol thermometers are red. Thermometers typically contain up to 3 grams of mercury.

Mercury-containing thermostats use mercury tilt switches. Mercury thermostats are identified as non-electronic. About 3 grams of mercury are typically contained in each mercury tilt switch, and each thermostat commonly requires 2 to 6 mercury tilt switches.

Fluorescent light tubes were present that may be considered universal waste per the TCEQ regulations. Two fluorescent light tubes were observed at the Site.

No thermostats containing mercury were observed in the equipment building at the Site.

7.6 Fuel Storage Tanks

No fuel storage tanks were located at the Site.

7.7 Household Chemicals

One carbon dioxide fire extinguisher was observed in the equipment building.

7.8 Refrigerant/Chlorofluorocarbons (CFC)

No air-conditioning units were observed at the Site.

7.9 Oils and Lubricants

No oils or lubricants were observed at the Site.

7.10 Radioactive Components

Parsons did not observe any emergency exit signs at the Site that were would be suspected of containing a radioactive source.

7.11 Batteries

According to the FAA technician, there had been four lead-acid batteries stored in a fiberglass battery box. The batteries were removed from the Site.

Table 7-3 lists the hazardous substances and petroleum products observed at the Site.

TABLE 7-3
Quantity Summary of Hazardous/Nonhazardous Materials

MATERIAL	LOCATION	FORM	QUANTITY
Asbestos containing material	Equipment building	Floor tiles may contain asbestos	6' x 8'
Fire extinguisher	Equipment building	NA	1
Lead paint	OM Antenna	NA	unknown
Mercury containing equipment	Equipment building	Fluorescent bulbs	2
PCBs	Equipment building	Fluorescent light ballasts	1

7.13 Adjacent Properties

The adjacent properties were visually observed from the Site on March 18, 2009. Site observations of these properties are presented in Table 7-4.

TABLE 7-4
Adjacent Property Site Observations

GENERAL SITE SETTING	REMARKS
Current Use of Adjacent Property	Construction site of new school, access road, City-owned building
Past Use of Adjacent Property	Tree-covered area
Observations:	
North	Construction site for new school
South	Access road, City-owned utility building, Kuykendahl Road
East	Tree-covered area
West	Tree-covered area

7.14 Results of Site Reconnaissance

Parsons did not identify the presence of RECs during the site visit.

8.0 INTERVIEWS

General historical information regarding the past use of the Site was obtained by interviewing the following individuals:

TABLE 8-1
Interviews

NAME	RELATIONSHIP TO THE SITE	DATE OF INTERVIEW	TYPE OF INTERVIEW	RECOGNIZED ENVIRONMENTAL CONDITIONS
Owner Representative: Jana Blanco	FAA Realty Specialist	May 13, 2009	Email	NA
User Representative: Jesse Lopez	FAA Representative, SECM	March 18, 2009	On-Site Interview	None
Site Manager/Occupant: Rickey Smith	FAA ATSS/ENV, Houston Technical Support Center, Houston, TX	March 18, 2009	On-Site Interview	None
State/Local Agency: William Barry	Houston Fire Department Special Operations and Administration	May 19, 2009 and May 22, 2009	Telephone	No Response

Parsons contacted key site managers to obtain current and historical environmental information concerning the Site. Key site managers may include current or past owners of the Site, managers, or current occupants at the-site. Mr. Smith, FAA representative, accompanied Parsons personnel on the site visit and provided Parsons with information regarding this Site. Copies of the questionnaires are provided in Appendix D.

8.1 Interview with the Owner Representative

Parsons contacted Ms. Jana Blanco, Owner representative, on May 13, 2009. Ms. Blanco stated that the FAA acquired the property through condemnation. The Site was acquired on September 30, 1988. A copy of the email is included in Appendix D.

8.2 Interview with the User Representative

Parsons interviewed Mr. Jesse Lopez, FAA SECM, on March 18, 2009. Mr. Lopez was not aware of environmental conditions associated with the Site. A copy of the interview questionnaire is included in Appendix D.

8.3 Interview with the Site Manager/Occupant

Parsons interviewed Mr. Rickey Smith, FAA ATSS/ENV, on March 18, 2009. Mr. Smith was not aware of environmental conditions associated with the Site. Copies of the interview questionnaires are included in Appendix D.

8.4 Interview with the State/Local Agency

Parsons attempted to contact Assistant Chief William Barry during the preparation of this report. As of May 28, 2009, Parsons has not received a response from Mr. Barry.

9.0 FINDINGS

Parsons performed a Phase I/EDDA for the UYO OM site for the IAH in conformance with the scope and limitations of the ASTM Practice E1527-05. Any exceptions to or deletions from this practice are described in Section 2.0 of this report.

During the Site reconnaissance, Parsons inspected the Site for RECs relating to the present use of the Site and reviewed documents related to the Site.

Findings for the Site are as follows:

- There is one fluorescent light fixture with two fluorescent bulbs in the equipment building. There is a fire extinguisher in the equipment building. The floor tiles in the equipment building may contain asbestos.

- Electrical power to the Site is still active. A utility pole is located southwest of the fenced area.

- The antenna is painted; the paint may contain lead.

The above findings were not considered RECs.

10.0 OPINION

No evidence of a REC in connection with the Site was found.

11.0 CONCLUSIONS

An EDDA was conducted for the FAA for the UYO OM site for the George Bush Intercontinental/Houston Airport (IAH). The UYO OM facility is located approximately 5.5 miles west of the IAH at 13418 Kuykendahl Road, Houston, Texas. This report was performed in accordance with the American Society for Testing and Materials (ASTM), *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (E-1527-05) and the Federal Aviation Administration (FAA) Order 1050.19B, *Environmental Due Diligence Audits in the Conduct of FAA Real Property Transactions*.

No evidence of RECs in connection with the Site was found.

12.0 DEVIATIONS

Although Parsons attempted to obtain reasonable ascertainable information regarding the Site, some information was either not received or not readily available at the time of this report. Therefore, consistent with ASTM Standard E 1527-05, the following data gaps have been identified:

- Parsons has requested information from the City of Houston Fire Department. No response has been received.
- Parsons requested a search of Sanborn Fire Insurance Maps by EDR. Sanborn Fire Insurance Maps were not available for the Site.
- Parsons was limited by the records obtained during the course of this investigation. Little information is known about the wells that are located within the search distance of the Site.

Based on a review of the data gaps presented above, it is Parsons' opinion that the data failure is not likely to have affected the identification of RECs at the Site.

13.0 ADDITIONAL SERVICES

An evaluation of business environmental risk associated with the Site was not included in the scope of work. The EDDA does not incorporate non-scope considerations such as lead in drinking water testing, wetlands, regulatory compliance, cultural and historical resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, high voltage power lines, and mold.

14.0 REFERENCES

ASTM, 2005. Designation E 1527-05, *Standard Guide for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. Prepared by American Society for Testing and Materials (ASTM).

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15.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

I declare that to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in CFR Part 312.10.

Eliza D. Schacht
Environmental Engineer